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April 9, 2002

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#24

VIA HAND DELIVERY

Hand-Delivery Address:

Ms. Karin Tyson
Senior Legal Advisor
Office of Patent Legal Administration
Office of the Deputy Commissioner for
Patent Examination Policy
United States Patent and Trademark Office
Crystal Plaza 3-D09
2021 South Clark Place
Arlington, VA 22202

Re:

Application for Extension of Patent Term, Reissue Patent No. 36,755, Issued: January 27, 1998; "DNA Encoding Tumor Necrosis Factor – Alpha and Beta

Receptors", Smith et. al.
Assignee: Immunex Corporation

Atty. Dkt.: IMM200/58000/4-001EX

Dear Ms. Tyson:

With regard to the above-referenced Patent Term Extension Application, enclosed please find the following for inclusion in your files:

- 1) Additional copy of Power of Attorney and General Authority from Agent of Assignee dated 8/25/00;
- 2) Transmittal letter and Supplemental Application for Extension of Patent Term Based on Regulatory Review of a New Drug Application dated 8/31/00, including Exhibits;
- 3) Request for Additional Certified Copies of Patent Term Extension Certificate; and
- 4) Return postcard.

Please date-stamp and return the enclosed postcard to evidence receipt of these documents.

Ms. Karin Tyson Page 2 April 9, 2002

Per our telephone conversation today, and in accordance with Attachment 1 (additional copy of Power of Attorney), please direct all future correspondence to the following:

Tracey B. Davies Vinson & Elkins L.L.P. 2300 First City Tower 1001 Fannin Street Houston, Texas 77002-6760 (512) 495-8619 (512) 236-3215 (Fax)

Thank you very much for your time and assistance with this matter. If you have any questions, please do not hesitate to contact me.

Very truly yours,

Tracey B. Davies

1498:3058 Enclosures

cc: Michael Kirschner (w/o encls.)

Gordon Kit (w/o encls.)

Marya Breig, Docket Specialist (w/o encls.)

271273_1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:

US Patent No. RE 36,755

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Issued:

June 27, 2000

APR 1 0 2002

Inventors:

Smith, Craig A., Seattle, Washington Goodwin, Raymond G., Seattle, Washington XAM UNIT

Beckmann, M. Patricia, Poulsbo, Washington

Assignee:

Immunex Corporation, Seattle, Washington

For:

DNA Encoding Tumor Necrosis Factor- alpha and - beta receptors

POWER OF ATTORNEY AND GENERAL AUTHORITY FROM AGENT OF ASSIGNEE

Commissioner for Patents Washington, D.C. 20231

Sir:

Immunex Corporation hereby certifies that it is the assignee of the entire right, title and interest in the patent, and reissue application for patent.

The undersigned (whose title is supplied below) is empowered to act on behalf of the agent of said assignee.

The undersigned has reviewed all of the documents in the chain of title of the patent identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The agent of said assignee hereby appoints Willem G. Schuurman (Reg. No. 29,998); Gregory L. Porter (Reg. No. 40,131); Andrew G. DiNovo (Reg. No. 40,115), Minh-Hien Nguyen (Reg. No. 37,294); Adam V. Floyd (Reg. No. 39,192); Timothy S. Corder (Reg. No. 38,414); Brian K. Buss (Reg. No. 42,375); Tracey B. Davies (Reg. No. 44,644); Stephen J. Moloney (Reg. No. 44,947); David B. Weaver (Reg. No. 43,244) as its attorneys or agents with full power of substitution and revocation to transact all business in the Patent and Trademark Office in connection with the above-identified patent, including, but not limited to, filing for patent term extensions under 35 U.S.C. § 156. The agent of said assignee requests that all correspondence and telephone communications be directed to the following person at the mailing address and telephone number hereafter given:

Tracey B. Davies VINSON & ELKINS L.L.P. 2300 First City Tower 1001 Fannin Street Houston, Texas 77002-6760 (512) 495-8619

The undersigned hereby declares that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent.

ASSIGNEE:

IMMUNEX CORPORATION

Name:

Michael Kirschner

Title: Vice President of Intellectual Property

Date: <u>August</u> 25, 2000

ATTORNEYS AT LAW

Writer's Phone: 512/495-8619 Writer's Fax: 512/236-3215

VINSON & ELKINS L.L.P. ONE AMERICAN CENTER **SUITE 2700** 600 CONGRESS AVENUE AUSTIN, TEXAS 78701-3200 TELEPHONE (512) 495-8400 FAX (512) 495-8612

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August 31, 2000

Box: Patent Ext.

Commissioner for Patents Washington, D.C. 20231

> Application for Extension of Patent Term, Patent No.: 5,712,155, Issued: RE:

January 27, 1998; "DNA Encoding Tumor Necrosis Factor - Alpha and

- Beta Receptors", Smith et al.

Assignee:

Immunex Corporation

Atty. Dkt:

IMM200/58000/4-001EX

Sir:

The following documents are being forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

- 1. Supplement to Application for Extension of Patent Term Based on Regulatory Review of a New Drug Application as Provided Under 35 U.S.C. § 156(D)(1) (in duplicate);
- 2. Exhibits 1-3 (in duplicate);
- 3. A return postcard to evidence receipt of these materials. Please date stamp and return this postcard.

It is believed that no fees are due in connection with this filing. Should it be determined that fees are required, the Commissioner is hereby authorized to deduct such fees from Vinson & Elkins L.L.P. deposit account no. 22-0365/IMM200/4-001EX.

Respectfully submitted,

Tracey B. Davies

Attorney for Applicant

Reg. No. 44,644

1498:9311 **Enclosures**

IN THE UNITED STATES PATENTAND TRADEMARK OFFICE

In re:

U.S. Patent Re 36,755 (Reissue of U.S. Patent No. 5,712,155)

Issued:

June 27, 2000 (Issue date of original patent: January 27, 1998)

Inventor:

Smith, Craig A., Seattle, Washington

Goodwin, Raymond G., Seattle, Washington Beckmann, M. Patricia, Poulsbo, Washington

Assignee:

Immunex Corporation, Seattle, Washington

For:

DNA encoding tumor necrosis factor -alpha and -beta receptors

Commissioner for Patents Box Patent Extension Washington, D.C. 20231

SUPPLEMENT TO APPLICATION FOR EXTENSION OF PATENT TERM BASED ON REGULATORY REVIEW OF A NEW DRUG APPLICATION AS PROVIDED UNDER 35 U.S.C. § 156(D)(1)

Sir:

On December 22, 1998 an application for extension of patent term based on regulatory review of a new drug application, as provided under 35 U.S.C. § 156(D)(1) was filed in this matter. This application made all arguments and references to the pending re-issue patent, filed from issued U.S. Patent 5,712,155. On June 27, 2000, that reissue patent (Re. 36,755) was issued by the patent office.

This paper is filed to update the original patent term extension application. The information previously provided is supplemented as follows:

I. 37 C.F.R. §1.740(a)(6): A complete identification of the patent for which an extension is being sought by the name of the inventor, the patent number, the date of issue, and the date of expiration.

Response in Original Request for Patent Term Extension	Updated Information
This application for extension relates to the reissue patent expected to be granted with respect to U.S. patent 5,712,155, issued on	This application for extension relates to Re. 36,755, issued June 27, 2000, from U.S. patent 5,712,155.

January 27, 1998, on an application filed November 29, 1994, as a continuation of U.S. Ser. No. 523,635, filed May 10, 1990, now U.S. patent 5,395,760, which is a continuation-in-part of U.S. Ser. No. 421,417, filed October 13, 1989, now abandoned which is a continuation-in-part of U.S. Ser. No. 405,370, filed September 11, 1989 now abandoned, which is a continuation-in-part of U.S. Ser. No. 403,241, filed September 5, 1989, now abandoned. The term of this patent subsequent to March 7, 2012 has been disclaimed.

The remainder of the information remains the same.

II. 37 C.F.R. §1.740(a)(7) A copy of the patent for which an extension is being sought, including the entire specification (including claims) and drawings.

Response in Original Request for Patent Term Extension	Updated Information
A copy of the application for the reissue patent for which an extension is being sought, including the entire specification (including claims) appears in Exhibit B, together with U.S. patent 5,172,155.	A copy of Re. 36,755, including the entire specification and claims, is attached hereto as Exhibit 1.

III. 37 C.F.R. §1.740(a)(8): A copy of any disclaimer, certificate of correction, receipt of maintenance fee payment, or reexamination certificate issued in the patent.

Response in Original Request for Patent	Updated Information
Term Extension	,
The reissue patent for which extension is being sought has been the subject of disclaimer of the term subsequent to March 7, 2012. A copy of the disclaimer is provided as Exhibit C. The U.S. patent on which the reissue is based has not been the subject of a certificate of correction. A copy of the reissue application and the amendments made via reissue is attached as Exhibit B. The U.S. patent on which the reissue is base has not been subject to a reexamination. No maintenance fees have become due or payable as of the date of this application for extension.	The U.S. Patent (5,712,155) upon which Re 36,755 is based was the subject of a Certificate of Correction, a copy of which is attached hereto as Exhibit 2. It consists of corrections to claim 10 of U.S. Patent No. 5,712,155. The corrections are reflected in Re. 36,755.

IV. 37 C.F.R. §1.740(a)(9): Comparison of pending reissue claims, upon which the original application for extension of patent term was based, and the issued claims of reissue patent 36,755

The relationship between the claims of then-pending reissue patent 36,755 and the approved product was clearly set forth in the Application for Patent Term Extension filed December 22, 1998, in accordance with the requirements of 37 C.F.R. § 1.740(a)(9). There are no changes to this information. Applicant's re-affirm that the approved product, the active ingredient in EnbrelTM lyophilized powder, remains claimed by the patent that is the subject of this patent term extension application (RE 36,755). Minor differences in the issued claims of Re 36,755 as compared to the pending claims on December 22, 1998 are set forth below for the sake of clarity.

Claims Pending at Time of Original Request	Claims as Issued in Re 36,755 (changes
for Patent Term Extension	indicated by conventional amendment form)
18. An isolated DNA molecule encoding a	18. An isolated DNA molecule encoding a
protein comprising a sequence of amino acids	protein comprising a sequence of amino acids
selected from the group consisting of amino	selected from the group consisting of amino
acids 1-163 of FIG. 2A and amino acids 1-233	acids 1-163 of [FIG, 2A] SEQ ID NO:1 and
of FIG. 3A, wherein said protein is capable of	amino acids 1-233 of [FIG. 3A] SEQ ID NO:3,
binding TNF.	wherein said protein is capable of binding
	TNF.
19. The isolated DNA molecule according	19. The isolated DNA molecule according
to Claim 18, wherein said protein comprises	to Claim 18, wherein said protein comprises
amino acids 1-163 of FIG. 2A.	amino acids 1-163 of [FIG. 2A] SEQ ID NO:1.
20. The isolated DNA molecule according	20. The isolated DNA molecule according
to Claim 18, wherein said protein comprises	to Claim 18, wherein said protein comprises
amino acids 1-185 of FIG. 2A.	amino acids 1-185 of [FIG. 2A] SEQ ID NO:1.
21. The isolated DNA molecule according	21. The isolated DNA molecule according
to Claim 18, wherein said protein comprises	to Claim 18, wherein said protein comprises
amino acids 1-235 of FIG. 2A.	amino acids 1-235 of [FIG. 2A] SEQ ID NO:1
22. An isolated DNA molecule encoding a	22. An isolated DNA molecule encoding a
protein selected from the group consisting of:	protein selected from the group consisting of:
(a) a polypeptide having a	(a) a polypeptide having a sequence
sequence of amino acids comprising	of amino acids comprising amino acids
amino acids 1-163 of FIG. 2A;	1-163 of [FIG. 2A] <u>SEQ ID NO:1;</u>
(b) a polypeptide having a sequence	(b) a polypeptide having a sequence
of amino acids comprising amino acids	of amino acids comprising amino acids
1-233 of FIG. 3A; and	1-233 of [FIG. 3A] <u>SEQ ID NO:3</u> ; and
(c) a polypeptide identical to the	(c) a polypeptide identical to the
polypeptides of (a) or (b) except for one	polypeptides of (a) or (b) except for
or more modification(s) to the sequence	one or more modification(s) to the
of amino acids selected from the group	sequence of amino acids selected from
consisting of: (i) inactivated N-linked	the group consisting of: (i) inactivated
glycosylation sites; (ii) altered KEX2	N-linked glycosylation sites; (ii)

protease cleavage sites; and (iii)	altered KEX2 protease cleavage sites;
substitution or deletion of cysteine	and (iii) substitution or deletion of
residues, wherein said protein is	cysteine residues, wherein said protein
capable of binding TNF.	is capable of binding TNF.
23. A recombinant expression vector	23. A recombinant expression vector
comprising the DNA molecule according to	comprising the DNA molecule according to
Claim 18, 19, 20, 21 or 22.	Claim 18, 19, 20, 21 or 22.
24. A host cell transformed or transfected	24. A host cell transformed or transfected
with the recombinant expression vector	with the recombinant expression vector
according to Claim 23.	according to Claim 23.
25. The host cell of Claim 24, wherein said	25. The host cell of Claim 24, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] cells.
26. The host cell of Claim 25, wherein said	26. The host cell of Claim 25, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
27. The host cell of Claim 26, wherein said	27. The host cell of Claim 26, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
28. A process for producing a protein	28. A process for producing a protein
capable of binding TNF, said process	capable of binding TNF, said process
comprising culturing a host cell of Claim 24	comprising culturing a host cell of Claim 24
under conditions suitable to effect expression	under conditions suitable to effect expression
of said protein	of said protein
29. The process of Claim 28, wherein said	29. The process of Claim 28, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] cells.
30. The process of Claim 29, wherein said	30. The process of Claim 29, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
31. The process of Claim 30, wherein said	31. The process of Claim 30, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
32. An isolated DNA molecule encoding a	32. An isolated DNA molecule encoding a
soluble TNF receptor protein comprising a	soluble TNF receptor protein comprising a
sequence of amino acids selected from the	sequence of amino acids selected from the
group consisting of from about amino acid 1	group consisting of from about amino acid 1 to
to about amino acid 163 of FIG. 2A and from	about amino acid 163 of [FIG. 2A] SEQ ID
about amino acid 1 to about amino acid 233 of	NO:1 and from about amino acid 1 to about
FIG. 3A, wherein said soluble TNF receptor	amino acid 233 of [FIG. 3A] SEQ ID NO:3,
protein is capable of binding TNF protein.	wherein said soluble TNF receptor protein is
Free Property of the Property	capable of binding TNF protein.
33. The isolated DNA molecule according	33. The isolated DNA molecule according
to Claim 32, wherein said soluble TNF	to Claim 32, wherein said soluble TNF
10 0.0000000000000000000000000000000000	1

receptor protein comprises from about amino	receptor protein comprises from about amino
acid 1 to about amino acid 163 of FIG. 2A.	acid 1 to about amino acid 163 of [FIG. 2A]
	SEQ ID NO:1.
34. The isolated DNA molecule according	34. The isolated DNA molecule according
to Claim 32, wherein said soluble TNF	to Claim 32, wherein said soluble TNF
receptor protein comprises from about amino	receptor protein comprises from about amino
acid 1 to about amino acid 185 of FIG. 2A.	acid 1 to about amino acid 185 of [FIG. 2A]
	SEQ ID NO:1.
35. The isolated DNA molecule according	35. The isolated DNA molecule according
to Claim 32, wherein said TNF soluble	to Claim 32, wherein said TNF soluble
receptor protein comprises from about amino	receptor protein comprises from about amino
acid 1 to about amino acid 235 of FIG. 2A.	acid 1 to about amino acid 235 of [FIG. 2A]
•	SEQ ID NO:1.
36. An isolated DNA molecule encoding a	36. An isolated DNA molecule encoding a
soluble TNF receptor protein selected from the	soluble TNF receptor protein selected from the
group consisting of:	group consisting of:
(a) a TNF receptor polypeptide	(a) a TNF receptor polypeptide
having a sequence of amino acids	having a sequence of amino acids
comprising from about amino acid 1 to	comprising from about amino acid 1 to
about amino acid 163 of FIG. 2A;	about amino acid 163 of [FIG. 2A]
(b) a TNF receptor polypeptide	SEQ ID NO:1;
having a sequence of amino acids	(b) a TNF receptor polypeptide
comprising from about amino acid 1 to	having a sequence of amino acids
about amino acid 233 of FIG. 3A; and	comprising from about amino acid 1 to
(c) a TNF receptor polypeptide	about amino acid 233 of [FIG. 3A]
identical to the TNF receptor	SEQ ID NO:3; and
polypeptides of (a) or (b) except for one	(c) a TNF receptor polypeptide
or more modification(s) to the sequence	identical to the TNF receptor
of amino acids selected from the group	polypeptides of (a) or (b) except for
consisting of: (i) inactivated N-linked	one or more modification(s) to the
glycosylation sites; (ii) altered KEX2	sequence of amino acids selected from
protease cleavage sites; and (iii)	the group consisting of: (i) inactivated
substitution or deletion of cysteine	N-linked glycosylation sites; (ii)
residues,	altered KEX2 protease cleavage sites;
wherein said soluble TNF receptor protein is	and (iii) substitution or deletion of
·	cysteine residues,
capable of binding TNF.	wherein said soluble TNF receptor protein is
	capable of binding TNF.
27 A recombinant everyosian vector	37. A recombinant expression vector
37. A recombinant expression vector comprising the DNA molecule according to	comprising the DNA molecule according to
1 . 9	Claim 32, 33, 34, 35 or 36.
Claim 32, 33, 34, 35 or 36. 38. A host cell transformed or transfected	38. A host cell transformed or transfected
	with the recombinant expression vector
with the recombinant expression vector	ļ
according to Claim 37.	according to Claim 37. 39. The host cell of Claim 38, wherein said
39. The host cell of Claim 38, wherein said	39. The host cell of Claim 38, wherein said host cell is selected from the group consisting
host cell is selected from the group consisting	most cent is selected from the Riorh consisting

of a microbial cell and a mammalian cell.	of [a] microbial [cell] <u>cells</u> and [a] mammalian [cell] <u>cells</u> .
40. The host cell of Claim 39, wherein said	40. The host cell of Claim 39, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
41. The host cell of Claim 40, wherein said	41. The host cell of Claim 40, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
42. A process for producing a protein	42. A process for producing a protein
capable of binding TNF, said process	capable of binding TNF, said process
comprising culturing a host cell of Claim 38	comprising culturing a host cell of Claim 38
under conditions suitable to effect expression	under conditions suitable to effect expression
of said protein.	of said protein.
43. The process of Claim 42, wherein said	43. The process of Claim 42, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] cells.
44. The process of Claim 43, wherein said	44. The process of Claim 43, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
45. The process of Claim 44, wherein said	45. The process of Claim 44, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
46. An isolated DNA molecule encoding a	46. An isolated DNA molecule encoding a
soluble TNF receptor protein comprising a	soluble TNF receptor protein comprising a
sequence of amino acids selected from the	sequence of amino acids selected from the
group consisting of from amino acid 1 to	group consisting of from amino acid 1 to
amino acid 163 of FIG. 2A and from amino	amino acid 163 of [FIG. 2A] SEQ ID NO:1
acid 1 to amino acid 233 of FIG. 3A, wherein	and from amino acid 1 to amino acid 233 of
said soluble TNF receptor protein is capable of	[FIG. 3A] SEQ ID NO:3, wherein said soluble
binding TNF protein.	TNF receptor protein is capable of binding
	TNF protein.
47. The isolated DNA molecule according	47. The isolated DNA molecule according
to Claim 46, wherein said soluble TNF	to Claim 46, wherein said soluble TNF
receptor protein comprises from amino acid 1	receptor protein comprises from amino acid 1
to amino acid 163 of FIG. 2A.	to amino acid 163 of [FIG. 2A] SEQ ID NO:1.
48. The isolated DNA molecule according	48. The isolated DNA molecule according
to Claim 46, wherein said soluble TNF	to Claim 46, wherein said soluble TNF
receptor protein comprises from amino acid 1	receptor protein comprises from amino acid 1
to amino acid 185 of FIG. 2A.	to amino acid 185 of [FIG. 2A] SEQ ID NO:1.
49. The isolated DNA molecule according	49. The isolated DNA molecule according
to Claim 46, wherein said soluble TNF	to Claim 46, wherein said soluble TNF
receptor protein comprises from amino acid 1	receptor protein comprises from amino acid 1
to amino acid 235 of FIG. 2A.	to amino acid 235 of [FIG. 2A] SEQ ID NO:1.
50. An isolated DNA molecule encoding a	50. An isolated DNA molecule encoding a
soluble TNF receptor protein selected from the	soluble TNF receptor protein selected from the

	
group consisting of:	group consisting of:
(a) a TNF receptor polypeptide	(a) a TNF receptor polypeptide
having a sequence of amino acids	having a sequence of amino acids
comprising from amino acid 1 to	comprising from amino acid 1 to
amino acid 163 of FIG. 2A;	amino acid 163 of [FIG. 2A] SEQ ID
(b) a TNF receptor polypeptide	<u>NO:1;</u>
having a sequence of amino acids	(b) a TNF receptor polypeptide
comprising from amino acid 1 to amino	having a sequence of amino acids
acid 233 of FIG. 3A; and	comprising from amino acid 1 to
(c) a TNF receptor polypeptide	amino acid 233 of [FIG. 3A] SEQ ID
identical to the TNF receptor	NO:3; and
polypeptides of (a) or (b) except for one	(c) a TNF receptor polypeptide
or more modification(s) to the sequence	identical to the TNF receptor
of amino acids selected from the group	polypeptides of (a) or (b) except for
consisting of: (i) inactivated N-linked	one or more modification(s) to the
glycosylation sites; (ii) altered KEX2	sequence of amino acids selected from
protease cleavage sites; and (iii)	the group consisting of: (i) inactivated
substitution or deletion of cysteine	N-linked glycosylation sites; (ii)
-	altered KEX2 protease cleavage sites;
residues,	and (iii) substitution or deletion of
wherein said soluble TNF receptor protein is	
capable of binding TNF.	cysteine residues,
Note: A typographical error in the first	wherein said soluble TNF receptor protein is
submission resulted in claim 33 being	capable of binding TNF.
reproduced here.	
51. A recombinant expression vector	51. A recombinant expression vector
comprising the DNA molecule according to	comprising the DNA molecule according to
Claim 46, 47, 48, 49 or 50.	Claim 46, 47, 48, 49 or 50.
52. A host cell transformed or transfected	52. A host cell transformed or transfected
with the recombinant expression vector	with the recombinant expression vector
according to Claim 51.	according to Claim 51.
53. The host cell of Claim 52, wherein said	53. The host cell of Claim 52, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] <u>cells</u> .
54. The host cell of Claim 53, wherein said	54. The host cell of Claim 53, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
55. The host cell of Claim 54, wherein said	55. The host cell of Claim 54, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
56. A process for producing a protein	56. A process for producing a protein
capable of binding TNF, said process	capable of binding TNF, said process
comprising culturing a host cell of Claim 52	comprising culturing a host cell of Claim 52
under conditions suitable to gffect expression	under conditions suitable to effect expression
of said protein.	of said protein.
57. The process of Claim 56, wherein said	57. The process of Claim 56, wherein said

host cell is selected from the group consisting host cell is selected from the group	
of a microbial cell and a mammalian cell. of [a] microbial [cell] cells and [a]	mammalian
[cell] <u>cells</u> .	
58. The process of Claim 57, wherein said 58. The process of Claim 57, v	vherein said
mammalian cell is selected from the group mammalian [cell is] cells are selected	
consisting of L cells, C127 cells, 3T3 cells, group consisting of L cells, C127	
CHO cells, BHK cells and COS-7 cells. 3T3 cells, CHO cells, BHK cells and	
cells.	
	wherein said
1 1	
mammalian cell is CHO cells. mammalian [cell is] cells are CHO	
60. An isolated DNA molecule encoding a 60. An isolated DNA molecule	_
protein comprising a sequence of amino acids protein comprising a sequence of	
selected from the group consisting of amino selected from the group consisting	
acids 1-163 of FIG. 2A and amino acids 1-233 acids 1-163 of [FIG. 2A] SEQ ID	
of FIG. 3A, wherein said protein lacks amino acids 1-233 of [FIG. 3A] S	
acids 236-265 of FIG. 2A and amino acids wherein said protein lacks amino a	
234-265 of FIG. 3A, respectively, and wherein 236-265 of [FIG. 2A] SEQ ID NO	
said protein is capable of binding TNF. acids 234-265 of [FIG. 3A] SEQ I	<u>D NO:3,</u>
respectively, and wherein said pro	tein is
capable of binding TNF.	
61. The isolated DNA molecule according 61. The isolated DNA moleculary	le according
to Claim 60, wherein said protein comprises to Claim 60, wherein said protein	_
amino acids 1-163 of FIG. 2A. amino acids 1-163 of [FIG. 2A] S	-
62. The isolated DNA molecule according 62. The isolated DNA molecule	
to Claim 60, wherein said protein comprises to Claim 60, wherein said protein	_
amino acids 1-185 of FIG. 2A. amino acids 1-185 of [FIG. 2A] S	-
63. The isolated DNA molecule according 63. The isolated DNA molecule	
to Claim 60, wherein said protein <i>comprises</i> to Claim 60, wherein said protein	_
amino acids 1-235 of FIG. 2A. amino acids 1-235 of [FIG. 2A]	-
64. An isolated DNA molecule encoding a 64. An isolated DNA molecule	
protein selected from the group consisting of: protein selected from the group co	
(a) a TNF receptor polypeptide (a) a TNF receptor pol	
having a sequence of amino acids <i>comprising</i> having a sequence of amino acids	
amino acids 1-163 of FIG. 2A, wherein said amino acids 1-163 of [FIG. 2A] S	
polypeptide lacks amino acids 236-265 of wherein said polypeptide lacks an	
(b) a TNF receptor polypeptide (c) a TNF receptor polypeptid (c) a TNF receptor polypeptide (c) a TNF receptor polypeptide (
having a sequence of amino acids comprising having a sequence of amino acids	
amino acids 1-233 of FIG. 3A, wherein said amino acids 1-233 of [FIG. 3A] S	
polypeptide lacks amino acids 234-265 of FIG. wherein said polypeptide lacks an	
3A; and 234-265 of [FIG. 3A] <u>SEQ ID NO</u>	
(c) a TNF receptor polypeptide (c) a TNF receptor polypeptide	
identical to the TNF receptor polypeptides of identical to the TNF receptor poly	peptides of
(a) or (b) except for one or more (a) or (b) except for one or more	
modification(s) to the sequence of amino acids modification(s) to the sequence of	
selected from the group consisting of: (i) selected from the group consisting	g of: (i)

	'
inactivated N-linked glycosylation sites; (ii)	inactivated N-linked glycosylation sites; (ii)
altered KEX2 protease cleavage sites; and (iii)	altered KEX2 protease cleavage sites; and (iii)
substitution or deletion of cysteine residues,	substitution or deletion of cysteine residues,
wherein said protein is capable of binding	wherein said protein is capable of binding
TNF.	TNF.
65. A recombinant expression vector	65. A recombinant expression vector
comprising the DNA molecule according to	comprising the DNA molecule according to
Claim 60, 61, 62, 63 or 64.	Claim 60, 61, 62, 63 or 64.
66. A host cell transformed or transfected	66. A host cell transformed or transfected
with the recombinant expression vector	with the recombinant expression vector
according to Claim 65.	according to Claim 65.
67. The host cell of Claim 66, wherein said	67. The host cell of Claim 66, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
or a microbiai con and a manmanan con.	[cell] cells.
68. The host cell of Claim 67, wherein said	68. The host cell of Claim 67, wherein said
mammalian cell is selected from the group	mammalian cell is selected from the group
consisting of L cells, C127 cells, 3T3 cells,	consisting of L cells, C127 cells, 3T3 cells,
,	CHO cells, BHK cells and COS-7 cells.
CHO cells, BHK cells and COS-7 cells.	
69. The host cell of Claim 68, wherein said	69. The host cell of Claim 68, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
70. A process for producing a protein	70. A process for producing a protein
capable of binding TNF, said process	capable of binding TNF, said process
comprising culturing a host cell of Claim 67	comprising culturing a host cell of Claim 67
under conditions suitable to effect expression	under conditions suitable to effect expression
of said protein.	of said protein.
71. The process of Claim 70, wherein said	71. The process of Claim 70, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] <u>cells</u> .
72. The process of Claim 71, wherein said	72. The process of Claim 71, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells. BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
73. The process of Claim 72, wherein said	73. The process of Claim 72, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
74. An isolated DNA molecule encoding a	74. An isolated DNA molecule encoding a
protein comprising a sequence of amino acids	protein comprising a sequence of amino acids
selected from the group consisting of amino	selected from the group consisting of amino
acids 1-163 of FIG. 2A and amino acids 1-233	acids 1-163 of [FIG. 2A] SEQ ID NO:1 and
of FIG. 3A, wherein said protein lacks a	amino acids 1-233 of [FIG. 3A] SEQ ID NO:3,
functional transmembrane region, and	wherein said protein lacks a functional
wherein said protein is capable of binding	transmembrane region, and wherein said
TNF.	protein is capable of binding TNF.
75. The isolated DNA molecule according	75. The isolated DNA molecule according
1	
to Claim 74, wherein said protein comprises	to Claim 74, wherein said protein comprises

amino acids 1-163 of FIG. 2A.	amino acids 1-163 of [FIG. 2A] SEQ ID NO:1.
76. The isolated DNA molecule according	76. The isolated DNA molecule according
to Claim 74, wherein said protein comprises	to Claim 74, wherein said protein comprises
amino acids 1-185 of FIG. 2A.	amino acids 1-185 of [FIG. 2A] SEQ ID NO:1.
77. The isolated DNA molecule according	77. The isolated DNA molecule according
to Claim 74, wherein said protein comprises	to Claim 74, wherein said protein comprises
amino acids 1-235 of FIG. 2A.	amino acids 1-235 of [FIG. 2A] SEQ ID NO:1.
78. An isolated DNA molecule encoding a	78. An isolated DNA molecule encoding a
protein selected from the group consisting of:	protein selected from the group consisting of:
(a) a TNF receptor polypeptide	(a) a TNF receptor polypeptide
having a sequence of amino acids comprising	having a sequence of amino acids comprising
amino acids 1-163 of FIG. 2A;	amino acids 1-163 of [FIG. 2A] SEQ ID NO:1;
(b) a TNF receptor polypeptide	(b) a TNF receptor polypeptide
having a sequence of amino acids comprising	having a sequence of amino acids comprising
amino acids 1-233 of FIG. 3A; and	amino acids 1-233 of [FIG. 3A] SEQ ID NO:3;
(c) a TNF receptor polypeptide	and
identical to the TNF receptor polypeptides of	(c) a TNF receptor polypeptide
(a) or (b) except for one or more	identical to the TNF receptor polypeptides of
modification(s) to the sequence of amino acids	(a) or (b) except for one or more
selected from the group consisting of: (i)	modification(s) to the sequence of amino acids
inactivated N-linked glycosylation sites; (ii)	selected from the group consisting of: (i)
altered KEX2 protease cleavage sites; and (iii)	inactivated N-linked glycosylation sites; (ii)
substitution or deletion of cysteine residues,	altered KEX2 protease cleavage sites; and (iii)
wherein said protein lacks a functional	substitution or deletion of cysteine residues,
transmembrane region; and wherein said	wherein said protein lacks a functional
protein is capable of binding TNF.	transmembrane region; and wherein said
	protein is capable of binding TNF.
79. A recombinant expression vector	79. A recombinant expression vector
comprising the DNA molecule according to	comprising the DNA molecule according to
Claim 74, 75, 76, 77 or 78.	Claim 74, 75, 76, 77 or 78.
80. A host cell transformed or transfected	80. A host cell transformed or transfected
with the recombinant expression vector	with the recombinant expression vector
according to Claim 79.	according to Claim 79.
81. The host cell of Claim 80, wherein said	81. The host cell of Claim 80, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] <u>cells</u> .
82. The host cell of Claim 81, wherein said	82. The host cell of Claim 81, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
83. The host cell of Claim 82, wherein said	83. The host cell of Claim 82, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.
84. A process for producing a protein	84. A process for producing a protein
capable of binding TNF, said process	capable of binding TNF, said process
comprising culturing a host cell of Claim 80	comprising culturing a host cell of Claim 80

under conditions suitable to effect expression	under conditions suitable to effect expression
of said protein.	of said protein.
85. The process of Claim 84, wherein said	85. The process of Claim 84, wherein said
host cell is selected from the group consisting	host cell is selected from the group consisting
of a microbial cell and a mammalian cell.	of [a] microbial [cell] cells and [a] mammalian
	[cell] <u>cells</u> .
86. The process of Claim 85, wherein said	86. The process of Claim 85, wherein said
mammalian cell is selected from the group	mammalian [cell is] cells are selected from the
consisting of L cells, C127 cells, 3T3 cells,	group consisting of L cells, C127 cells, 3T3
CHO cells, BHK cells and COS-7 cells.	cells, CHO cells, BHK cells and COS-7 cells.
87. The process of Claim 86, wherein said	87. The process of Claim 86, wherein said
mammalian cell is CHO cells.	mammalian [cell is] cells are CHO cells.

V. 37 C.F.R. § 1.740(a)(10): A statement beginning on a new page, of the relevant dates and information pursuant to 35 U.S.C. 156(g) in order to enable the Secretary of Health and Human Services or the Secretary of Agriculture, as appropriate, to determine the applicable regulatory review period, particularly, for a patent claiming a human drug, antibiotic, or human biological product, the effective date of the investigational new drug (IND) application and the IND number; the date on which a new drug application (NDA) or a Product License Application (PLA) was initially submitted and the NDA or PLA number and the date on which the NDA was approved or the Product License issued.

Response in Original Request for Patent Term Extension	Additional Information
For the Biological License Application (BLA) Approval of Enbrel TM Lyophilized Powder the following are the applicable dates:	
Effective date for IND app.: June 26, 1992	IND number: BB IND 45-71
Initial Submission of BLA: March 9, 1998 for Chemistry Manufacturing and Controls (CMC) portion of the BLA, and June 22, 1998 for acceptance of the completed BLA.	BLA number: 98-0286
FDA Approval for BLA: November 2, 1998	

VI. 37 C.F.R. § 1.740(a)(15) The name, address, and telephone number of the person to whom inquiries and correspondence relating to the application for patent term extension are to be directed.

Response in Original Request for Patent Term Extension	Updated Information		
Please direct all correspondence in connection with this application to:	Pursuant to the Power of Attorney attached as Exhibit 3, please direct all correspondence in connection with this application to:		
Robert A. Armitage Registration No: 27,417 Vinson & Elkins, L.L.P., Suite 700 1455 Pennsylvania Avenue, N.W. Washington, D.C. 20004-1008 Telephone: (202)639-6692 Facsimile: (202)639-6604.	Tracey B. Davies Registration No: 44,644 Vinson & Elkins, L.L.P. 2300 First City Tower 1001 Fannin Houston, Texas 77002-6760 Telephone: (512)495-8619 Facsimile: (512)236-3215.		

VII. 37 C.F.R. § 1.740(a)(16): A duplicate of the application papers, certified as such.

Applicant hereby certifies that this supplement to the application for extension filed on December 22, 1998 is being filed in duplicate.

VIII. 37 C.F.R § 1.740(a)(17): An oath or declaration.

Applicant re-affirms the following:

Applicant, through its undersigned patent attorney authorized to practice before the Patent and Trademark Office and who has general authority from the owner to act on behalf of the owner in patent matters, being duly warned that willful false statements are punishable by fine or imprisonment or both under section 1001 of Title 18, United States Code and that willful false statements and the like may jeopardize the validity of this application and the patent to which it relates, states and declares that the following statements made based on his own knowledge are true and that all statements made on information and belief are believed to be true:

- (1) The undersigned is registered to practice before the Patent and Trademark Office and is making this declaration as a patent attorney who has general authority to act on behalf of the applicant in patent matters.
- (2) The undersigned has reviewed and understands the contents of the application being submitted pursuant to this section;
- (3) The undersigned believes the patent is subject to extension pursuant to 37 C.F.R. § 1.710;
- (4) The undersigned believes an extension of the length claimed is justified under 35 U.S.C. 156 and the applicable regulations; and

(5) The undersigned believes the patent for which the extension is being sought meets the conditions for extension of the term of a patent as set forth in 37 C.F.R. § 1.720.

It is believed that no fee is due. If a fee is warranted, the Commissioner is hereby authorized to deduct said fee from deposit account no. 22-0365/4-1. If this application for extension of patent term is held to be informal, applicant may seek to have that holding reviewed by filing a petition with the required fee, as necessary, pursuant to 37 C.F.R. §§ 1.181, 1.182 or 1.183, as appropriate, within such time as may be set in any notice that the application has been held to be informal, or if no time is set, within one month of the date on which the application was held informal.

Applicant is providing herewith in Exhibit 3 a power of attorney and general authority for the undersigned to execute this application and make the declaration required by 37 C.F.R § 1.740(a)(17), set forth in section VIII, above.

Respectfully submitted,

Immunex Corporation

Tracey B. Davies, Registration Number 44,644

Vinson & Elkins, L.L.P.

600 Congress Avenue, Suite 2700

Austin, Texas 78701

Telephone: (512) 495-8619 Facsimile: (512) 236-3215 Email: tdavies@velaw.com.

Attachments:

Exhibit 1: Copy of U.S. Reissue Patent Re. 36,755.

Exhibit 2: Copy of Certificate of Correction for U.S. patent 5,712,155.

Exhibit 3: Power of Attorney and General Authority from Assignee

Austin:137653 v 1

RECEIVED BY THE UNITED STATES PATENT AND TRADEMARK OFFICE

Paper:

Transmittal Letter

Supplement to Application for Extension of Patent Term Based on Regulatory Review of a New Drug Application as Provided

Under 35 U.S.C. § 156(D)(1) (in duplicate);

Docket Office

Exhibits 1-3 (in duffete VED

Postcard

Inventor:

Smith et al.

Assignee:

Immunex Corporation Elkins

Patent No.:

5,712,155

Docket No.:

IMM200/58000/4-001EX

Issued:

January 27, 1998

Entitled:

DNA ENCODING TUMOR NECROSIS FACTOR - ALPHA

AND - BETA RECEPTORS

Date Sent:

August 31, 2000

FROM : SUGHRUE-DC

PHONE NO.: 202+293+7860

Jul. 19 2000 03:31PM P2

UNICO STATES PATENT AND TRADEMAK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,712,155

DATED

: January 27, 1998

INVENTOR(S): Craig A. Smith, et al

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 26, line 42, claim 10; change "adds" to - acids -.

Column 26, line 51, claim 10; change "(iv)", to -(v) -.

Column 26, line 66, claim 11; change "(ii)"; to - (iii) -.

Column 27, line 16, claim 12; change "(ii)" to - (iii) --.

Signed and Sealed this

Eighteenth Day of August, 1998

Bene Chras

Attest:

And sting Officer

BRUCE LEHMAN.

Commissioner of Patents and Trademarks

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:

US Patent No. RE 36,755

Issued:

June 27, 2000

Inventors:

Smith, Craig A., Seattle, Washington

Goodwin, Raymond G., Seattle, Washington Beckmann, M. Patricia, Poulsbo, Washington

Assignee:

Immunex Corporation, Seattle, Washington

For:

DNA Encoding Tumor Necrosis Factor- alpha and - beta receptors

POWER OF ATTORNEY AND GENERAL AUTHORITY FROM AGENT OF ASSIGNEE

Commissioner for Patents Washington, D.C. 20231

Sir:

Immunex Corporation hereby certifies that it is the assignee of the entire right, title and interest in the patent, and reissue application for patent.

The undersigned (whose title is supplied below) is empowered to act on behalf of the agent of said assignee.

The undersigned has reviewed all of the documents in the chain of title of the patent identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The agent of said assignee hereby appoints Willem G. Schuurman (Reg. No. 29,998); Gregory L. Porter (Reg. No. 40,131); Andrew G. DiNovo (Reg. No. 40,115), Minh-Hien Nguyen (Reg. No. 37,294); Adam V. Floyd (Reg. No. 39,192); Timothy S. Corder (Reg. No. 38,414); Brian K. Buss (Reg. No. 42,375); Tracey B. Davies (Reg. No. 44,644); Stephen J. Moloney (Reg. No. 44,947); David B. Weaver (Reg. No. 43,244) as its attorneys or agents with full power of substitution and revocation to transact all business in the Patent and Trademark Office in connection with the above-identified patent, including, but not limited to, filing for patent term extensions under 35 U.S.C. § 156. The agent of said assignee requests that all correspondence and telephone communications be directed to the following person at the mailing address and telephone number hereafter given:

Tracey B. Davies VINSON & ELKINS L.L.P. 2300 First City Tower 1001 Fannin Street Houston, Texas 77002-6760 (512) 495-8619

The undersigned hereby declares that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent.

ASSIGNEE:

IMMUNEX CORPORATION

Name:

Michael Kirschner

Title: Vice President of Intellectual Property

Date: Avaust 25,200

UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for Patent Term Extension: Immunex Corporation)		
Reissue Patent No.: 36,755)		
Filed: December 22, 1998)	Atty Dkt:	IMM200/4-001EX
For: DNA ENCODING TUMOR	j		
NECROSIS FACTOR – ALPHA)		
AND BETA RECEPTORS)		

REQUEST FOR ADDITIONAL CERTIFIED COPIES OF PATENT TERM EXTENSION CERTIFICATE

Ms. Karin Tyson
Senior Legal Advisor
Office of Patent Legal Administration
Office of the Deputy Commissioner for
Patent Examination Policy
2021 South Clark Place
Arlington, VA 22202

Dear Ms. Tyson:

Applicant requests ten (10) additional certified copies of the Patent Term Extension Certificate when it is granted. You are hereby authorized to deduct the fee for these certified copies from our Debit Account No. 22-0365/IMM200/4-001EX. Please notify my office when these certified copies are ready, so that I can arrange to have them retrieved directly from your office.

Please acknowledge receipt of this document via facsimile number (512) 236-3215. Should you have any questions regarding this matter, please contact the undersigned at (512) 495-8619.

Respectfully submitted,

Reg. No. 44,644

Vinson & Elkins L.L.P. 2300 First City Tower 1001 Fannin Street Houston, Texas 77002-6760 (512) 495-8619 (512) 236-3215 (Fax) Date: April 9, 2002